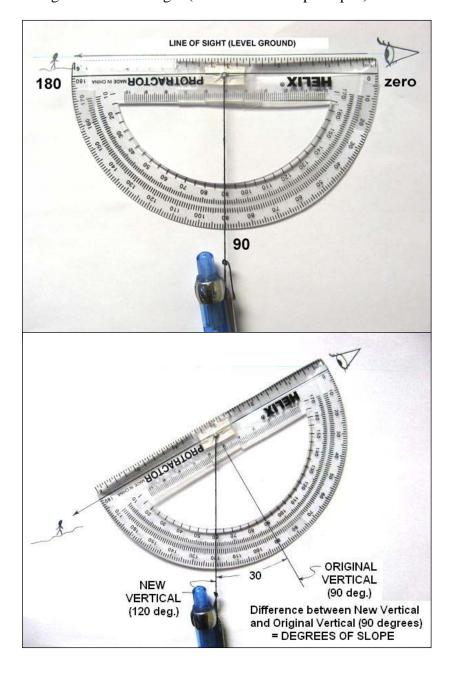
HOW TO MEASURE DEGREES OF SLOPE USING A PROTRACTOR

How can you measure the degrees of slope without an expensive instrument? You might be surprised to see how simple it is. You can make a slope angle measuring tool with an inexpensive protractor, string and a small weight (in this case a ballpoint pen).



- 1. Attach the string to the protractor at the midpoint between the zero and 180 degree marks (the vertex of the angle).
- 2. Hang a small weight on the end of the string to make a plumb bob. The string should hang over the 90 degree mark when the protractor's flat edge is parallel to the ground.
- 3. To measure the slope angle from the top of the slope, put your eye by the zero degree mark and sight along the flat edge of the protractor toward the bottom of the hill. If you're at the bottom, put your eye at the 180 degree mark and look up toward the top.
- 4. Check the new angle where the string falls when the plumb bob is hanging straight down.
- 5. To get the slope measurement in degrees, subtract 90 degrees from the new vertical angle. In this example, the new angle is 120 degrees, so the slope angle is 30 degrees (120-90 = 30).

To be as accurate as possible, you should sight along the protractor's edge to a point the same height above ground as your eye. (It helps to imagine someone of your height standing at the bottom of the slope.) Over a long distance, this discrepancy won't matter much. If you have any questions, call the Lakeway City Forester at 608-9722 or email forester@cityoflakeway.com.